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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/384,158	08/27/1999	MICHAEL S. BORELLA	99.226	7444
20306	7590	01/21/2004	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF 300 SOUTH WACKER DRIVE SUITE 3200 CHICAGO, IL 60606			NOBAHAR, ABDULHAKIM	
			ART UNIT	PAPER NUMBER
			2132	
DATE MAILED: 01/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/384,158	BORELLA ET AL.
	Examiner	Art Unit
	Abdulhakim Nobahar	2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 November 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) Interview Summary (PTO-413) Paper No(s). _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

Response to Arguments

1. This communication is in response to applicants' response received on November 10, 2003.
2. The document No. 65 of the Information Disclosure Statement list "Cisco IOS Solutions for Network Protocols, Volume I: IP" also was received November 10, 2003.
3. Applicants' arguments have been fully considered but they are not persuasive.
4. On page 2, Section III of the remarks, applicants argue that the combination of the two references is improper and yields an inoperative combination. Applicant also on page 3, first paragraph, argue that Ylonen does not disclose, and in fact, teaches away from, any conversion or modification of the packet passing through the virtual routers/gateways.

Tsuruoka teaches a method of network address translation for packet transferring between two networks (for example, a local network and an external network) (col. 2, lines 62-67 and col. 3, lines 37-45). The packet header updated in the routers according to a routing table in order to rout the packet to appropriate destination (col. 5, lines 33-45 and col. 8, lines 28-60).

Ylonen teaches a method for secure transmission (tunneling) of data packets between virtual routers of two or more computer networks (see, for example, abstract

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68J and col. 1, lines 12-25). For the purpose of tunneling only an IP header added to the original header of the packets (col. 2, lines 17-30), which is a security measure. The transmitted data packets are processed by the IPSEC module(s) and then received by a virtual router for further processing according to a routing table (col. 1, lines 30-50, col. 5, lines 5-10 and col. 7, line 65-col. 8, line 9). The processing of a data packet in a router as widely known in the art involves the routing of the packet based on the destination address in the packet header and a routing table stored in the router. The virtual routers in the Ylonen method deals with a data packet being transmitted from one network to another network based on the header information that includes the source and the destination addresses and involves packet header modification (col. 2, lines 1-15, lines 35-45 and col. 3, lines 57-62). Thus, Ylonen does not teach away from Tsuruoka and combining the two is not improper and would not yield an inoperative combination.

5. However, In light of the above submission examiner maintains the previous claim rejections double patenting and 35 USC § 103.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7, 10-14, and 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of copending Application No. 09/270967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of this application are broader than the claims 1-39 of copending application. These claims do not expressly specify that the security values and the ports are allocated to the devices on the local network by the router on the local network.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3, 6, 10-12 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No. 6,353,614. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of this application are broader than the claims 1-39 of copending application. These claims do not expressly specify that each device on the local network requests from the router on the local network through the Port Allocation Port, a unique port to identify that device to the router.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 USC 103(a) as being unpatentable over Tsuruoka (6,101,189) in view of Ylonen et al. (6,438,612 B1) (hereinafter Ylonen).

Referring to claims 1-20, Tsuruoka teaches:

"A method for distributed network address translation". See abstract and col. 3, lines 37-44.

"Providing a first network device and a second network device on a first network and a third network device on a second network external to the first network". See Fig. 1.

"Storing the external address in a table on the second network". See col. 7, lines 11-29 and col. 9, lines 1-15 where the conversion table is the (routing) table.

"Sending a packet having an external address from the third network device to the first network device". See Fig. 5B and col. Col. 7, lines 29-44.

"A computer readable medium having stored therein instructions for causing a central processing unit to execute the above-mentioned method". See col.6, lines 54-63 and Fig. 3.

"The second network device is a distributed network address translation router". See col. 1, lines 27-37 and col. 4, lines 55-67.

"Intercepting the with the second network device". See col. 2, lines 60-67, col. 3, lines 40-45 and col. 5, lines 37-44.

"Determining whether the external address of the packet has been specified by the first network device as being valid;

Sending the packet from the second network device to the first network device if the external address of the packet has been specified by the first network device is valid; and

Discarding the packet if the external address of the packet has not been specified by the first network device as being valid". See Figs. 5B, 5C, Fig. 8, S23 and col. 9, line 51-col. 10, line 40.

However, Tsuruoka does not teach the use of a security value to establish a security association between a device on the local network and a device on the external network. Ylonen teaches a secure tunneling method for establishing a virtual secure communication tunnel between two devices located on two different networks. In his method, Ylonen teaches the use of a security value and the IPSEC related protocols for

establishing a security association between two transmitting and receiving devices located on two different networks and checking the authenticity of the transmitting packets by inspecting the security value (abstract, col. 3, line 62-col. 4, line 58, col. 5, line 54-col. 6, line 14, col. 8, lines 10-42 and Fig. 5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the use of a security value in conjunction with IPSEC protocols stack as taught in Ylonen with the method of Tsuruoka to establish security association between two communicating devices located on two different network, because it would provide for cryptographic authentication and confidentiality of traffic between two communicating network nodes (col. 2, lines 60-67).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdulhakim Nobahar whose telephone number is 703-305-8074. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 703-305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Abdulhakim Nobahar
Examiner
Art Unit 2132

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January 14, 2004

Gilberto Barron
GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100